

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13

ring bonds :

1-2 1-6 2-3 2-7 3-4 3-10 4-5 4-13 5-6 7-8 8-9 9-10 10-11

11-12 12-13

exact/norm bonds :

1-2 1-6 2-3 2-7 3-4 3-10 4-5 4-13 5-6 7-8 8-9 9-10 10-11

11-12 12-13

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom

10:Atom 11:Atom 12:Atom 13:Atom

=> d his

(FILE 'HOME' ENTERED AT 17:45:53 ON 12 SEP 2003)

FILE 'REGISTRY' ENTERED AT 17:45:58 ON 12 SEP 2003

L1 STRUCTURE UPLOADED

L2 QUE L1

L3 0 S L2

L4 3 S L2 SSS FUL

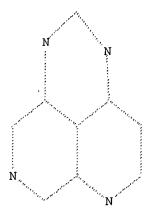
FILE 'CAPLUS' ENTERED AT 17:46:57 ON 12 SEP 2003

L5 1 S L4

=> d 12

L2 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation. L2 QUE ABB=ON PLU=ON L1

=> d ibib abs hitstr

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 2002:391714 CAPLUS

DOCUMENT NUMBER: 136:386132

TITLE:

Preparation of fused pyrimidonaphthyridines and pyrimidinoquinolines as CRF receptor antagonists INVENTOR(S): Haddach, Mustapha; Lanier, Marion C.; Huang, Charles

Q.; McCarthy, James R.

PATENT ASSIGNEE(S): Neurocrine Biosciences, Inc., USA

SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	PATENT NO.				ND.	DATE		APPLICATION NO.						DATE				
				A2 A3		20020523 20030515			WO 2001-US47919 20011102									
	w:	CO, GM, LS, PT, US,	CR, HR, LT, RO, UZ,	CU, HU, LU, RU, VN,	CZ, ID, LV, SD, YU,	DE, IL, MA, SE, ZA,	DK, IN, MD, SG, ZW,	DM, IS, MG, SI, AM,	DZ, JP, MK, SK, AZ,	EC, KE, MN, SL, BY,	EE, KG, MW, TJ, KG,	ES, KP, MX, TM, KZ,	FI, KR, MZ, TR, MD,	BZ, GB, KZ, NO, TT, RU,	GD, LC, NZ, TZ, TJ,	GE, LK, PH, UA, TM	GH, LR, PL, UG,	
US	2002 2002 1341	DE, BJ, 0395 1515 793	DK, CF, 89	ES, CG, A: A:	FI, CI, 5 1 2	FR, CM, 2002 2002 2003	GB, GA, 0527 1017 0910	GR, GN,	IE, GQ, A' U E	IT, GW, U 200 S 200 P 200	LU, ML, 02-3: 01-1: 01-9:	MC, MR, 9589 6694 8736	NL, NE,	2001: 2001:	SE, TD, 1102 1102	TR,	BF,	
NO PRIORITY OTHER SO	2003 Y APP	IE, 0019: LN.	SI, 97 INFO	LT, A	LV,	FI, 2003	RO, 0502	MK,	CY, N US 2 WO 2	AL, 0 200 000-2	TR 03-1: 24582	997 21P	P	NL, 2003 2000 2001	0502 1103	MC,	PT,	

GI

II

AΒ Title compds. I [X = N, CR3; R1 = CHR4R5; R2 = alkyl; R3 H, alkyl; R4 = H,alkyl, mono- or di(cycloalkyl)methyl, cycloalkyl, alkenyl, hydroxy-alkyl, alkylcarbonyloxy-alkyl, etc.; R5 = alkyl, mono- or di(cycloalkyl)methyl, Ar1CH2, alkenyl, alkyloxy-alkyl, hydroxy-alkyl, thienylmethyl, furanylmethyl, alkylthio-alkyl, etc. or R4-5 taken together with the carbon atom to which they are bonded form cycloalkyl; Ar = (un)substituted Ph, arom. heterocycle; Ar1 = (un)substituted Ph, pyridinyl] were prepd. For instance, 3-amino-2-(2,4,6-trimethylphenyl)pyridine (prepn. given) was reacted with Et acetoacetate (m-xylene, pTSA, reflux, -H2O) to give 4-hydroxy-2-methyl-8-(2,4,6-trimethylphenyl)-1,7-naphthyridine.intermediate was converted to the chloride (POCl3) and nitrated (5-position, HNO3, H2SO4) and the product reacted with 4-heptylamine and subsequently reduced (MeOH, H2-Pd/C, 35 psi) to afford 4-(heptan-4-ylamino)-2-methyl-5-amino-8-(2,4,6-trimethylphenyl)-1,7naphthyridine. Treatment of this with triethylorthoformate (reflux, 16 h) afforded II. CRF receptor antagonists of this invention had Ki < 10 .mu.M. I are useful in the treatment of a variety of disorders, including disorders manifesting hypersecretion of CRF in a warm-blooded animals, such as stroke.

## IT 428500-28-1P 428500-29-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug; prepn. of fused pyrimidonaphthyridines and pyrimidinoquinolines as CRF receptor antagonists)

RN 428500-28-1 CAPLUS

CN 1H-Pyrimido[4,5,6-de][1,7]naphthyridine, 8-methyl-1-(1-propylbutyl)-6-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

RN 428500-29-2 CAPLUS
CN 1H-Pyrimido[4,5,6-de][1,7]naphthyridine, 6-(2,4-dichlorophenyl)-8-methyl-1-(1-propylbutyl)- (9CI) (CA INDEX NAME)

=> d his

(FILE 'HOME' ENTERED AT 17:45:53 ON 12 SEP 2003)

FILE 'REGISTRY' ENTERED AT 17:45:58 ON 12 SEP 2003
L1 STRUCTURE UPLOADED

L2 QUE L1

L3 0 S L2 L4 3 S L2 SSS FUL

FILE 'CAPLUS' ENTERED AT 17:46:57 ON 12 SEP 2003 L5 1 S L4

SELECT RN L5 1-

FILE 'REGISTRY' ENTERED AT 17:47:50 ON 12 SEP 2003

L6 55 S E1-55

FILE 'CAPLUS' ENTERED AT 17:48:37 ON 12 SEP 2003

L9 15263 S L8

L10 ANALYZE L9 1- RN HIT : 36 TERMS

FILE 'REGISTRY' ENTERED AT 17:53:58 ON 12 SEP 2003

L11 1 S 9015-71-8

L12 1 S 141-97-9

L13 34 S L8 NOT (L11 OR L12)

FILE 'CAPLUS' ENTERED AT 17:54:49 ON 12 SEP 2003

L14 3 S L13

L15 3 S L5 OR L14

=> d bib abs hitstr 115 1-3

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applicants
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ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
L15
     2002:391714
                  CAPLUS
AN
DN
     136:386132
ΤI
     Preparation of fused pyrimidonaphthyridines and pyrimidinoquinolines as
     CRF receptor antagonists
     Haddach, Mustapha; Lanier, Marion C.; Huang, Charles Q.; McCarthy, James
IN
PA
     Neurocrine Biosciences, Inc., USA
so
     PCT Int. Appl., 33 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                              APPLICATION NO.
                       ____
PΙ
     WO 2002040480
                        A2
                              20020523
                                              WO 2001-US47919 20011102
     WO 2002040480
                        Α3
                              20030515
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             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
             US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
              BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2002039589
                        Α5
                              20020527
                                             AU 2002-39589
                                                                20011102
     US 2002151557
                        A1
                              20021017
                                              US 2001-16694
                                                                20011102
     EP 1341793
                        A2
                              20030910
                                              EP 2001-987366
                                                                20011102
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     NO 2003001997
                              20030502
                                             NO 2003-1997
                        Α
                                                                20030502
PRAI US 2000-245821P
                        Ρ
                              20001103
     WO 2001-US47919
                        W
                              20011102
OS
     MARPAT 136:386132
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Ι

II

GΙ

AB Title compds. I  $\{X = N, CR3; R1 = CHR4R5; R2 = alkyl; R3 H, alkyl; R4 = H,$ alkyl, mono- or di(cycloalkyl)methyl, cycloalkyl, alkenyl, hydroxy-alkyl, alkylcarbonyloxy-alkyl, etc.; R5 = alkyl, mono- or di(cycloalkyl)methyl, Ar1CH2, alkenyl, alkyloxy-alkyl, hydroxy-alkyl, thienylmethyl, furanylmethyl, alkylthio-alkyl, etc. or R4-5 taken together with the carbon atom to which they are bonded form cycloalkyl; Ar = (un)substituted Ph, arom. heterocycle; Ar1 = (un)substituted Ph, pyridinyl] were prepd. For instance, 3-amino-2-(2,4,6-trimethylphenyl)pyridine (prepn. given) was reacted with Et acetoacetate (m-xylene, pTSA, reflux, -H2O) to give 4-hydroxy-2-methyl-8-(2,4,6-trimethylphenyl)-1,7-naphthyridine. intermediate was converted to the chloride (POCl3) and nitrated (5-position, HNO3, H2SO4) and the product reacted with 4-heptylamine and subsequently reduced (MeOH, H2-Pd/C, 35 psi) to afford 4-(heptan-4-ylamino)-2-methyl-5-amino-8-(2,4,6-trimethylphenyl)-1,7naphthyridine. Treatment of this with triethylorthoformate (reflux, 16 h) afforded II. CRF receptor antagonists of this invention had Ki < 10 .mu.M. I are useful in the treatment of a variety of disorders, including disorders manifesting hypersecretion of CRF in a warm-blooded animals, such as stroke.

IT 428500-28-1P 428500-29-2P 428500-30-5P 428500-31-6P 428500-32-7P 428500-33-8P 428500-34-9P 428500-35-0P 428500-36-1P 428500-37-2P 428500-38-3P 428500-39-4P 428500-40-7P 428500-41-8P 428500-42-9P 428500-43-0P 428500-44-1P 428500-45-2P 428500-46-3P 428500-47-4P 428500-48-5P 428500-49-6P 428500-50-9P 428520-25-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug; prepn. of fused pyrimidonaphthyridines and pyrimidinoquinolines as CRF receptor antagonists)

RN 428500-28-1 CAPLUS

1H-Pyrimido[4,5,6-de][1,7]naphthyridine, 8-methyl-1-(1-propylbutyl)-6-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

RN 428500-29-2 CAPLUS

CN 1H-Pyrimido[4,5,6-de][1,7]naphthyridine, 6-(2,4-dichlorophenyl)-8-methyl-1-(1-propylbutyl)- (9CI) (CA INDEX NAME)

CN

RN 428500-30-5 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 7-(2,4-dichlorophenyl)-5-methyl-3-(1-propylbutyl)- (9CI) (CA INDEX NAME)

RN 428500-31-6 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 7-(2,4-dimethoxyphenyl)-5-methyl-3-(1-propylbutyl)- (9CI) (CA INDEX NAME)

RN 428500-32-7 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 7-(4-methoxy-2-methylphenyl)-5-methyl-3-(1-propylbutyl)- (9CI) (CA INDEX NAME)

RN 428500-33-8 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 7-(2,4-dichlorophenyl)-3-(1-ethylpropyl)-5-methyl- (9CI) (CA INDEX NAME)

RN 428500-34-9 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 3-(1-butylpentyl)-7-(2,4-dichlorophenyl)-5-methyl- (9CI) (CA INDEX NAME)

RN 428500-35-0 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 5-methyl-7-[4-(1-methylethyl)phenyl]-3-(1-propylbutyl)- (9CI) (CA INDEX NAME)

RN 428500-36-1 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 7-(4-chlorophenyl)-5-methyl-3-(1-propylbutyl)- (9CI) (CA INDEX NAME)

RN 428500-37-2 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 7-(4-methoxyphenyl)-5-methyl-3-(1-propylbutyl)- (9CI) (CA INDEX NAME)

RN 428500-38-3 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 7-[4-(1,1-dimethylethyl)phenyl]-5-methyl-3-(1-propylbutyl)- (9CI) (CA INDEX NAME)

RN 428500-39-4 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 7-(2-benzofuranyl)-5-methyl-3-(1-propylbutyl)- (9CI) (CA INDEX NAME)

RN 428500-40-7 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 7-(3,4-dimethoxyphenyl)-5-methyl-3-(1-propylbutyl)- (9CI) (CA INDEX NAME)

RN 428500-41-8 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 7-(2-chlorophenyl)-5-methyl-3-(1-propylbutyl)- (9CI) (CA INDEX NAME)

RN 428500-42-9 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 7-benzo[b]thien-2-yl-5-methyl-3-(1-propylbutyl)- (9CI) (CA INDEX NAME)

RN 428500-43-0 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 5-methyl-3-(1-propylbutyl)-7-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 428500-44-1 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 5-methyl-7-[4-(methylthio)phenyl]-3-(1-propylbutyl)- (9CI) (CA INDEX NAME)

RN 428500-45-2 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 7-[2-methoxy-5-(1-methylethyl)phenyl]-5-methyl-3-(1-propylbutyl)- (9CI) (CA INDEX NAME)

RN 428500-46-3 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 5-methyl-3-(1-propylbutyl)-7-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 428500-47-4 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 5-methyl-3-(1-propylbutyl)-7-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 428500-48-5 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 7-(2,4-dichlorophenyl)-5-methyl-3-(3-methylcyclohexyl)- (9CI) (CA INDEX NAME)

RN 428500-49-6 CAPLUS

CN 1,4-Diazepino[5,6,7-de][1,7]naphthyridine, 1,2,3,4-tetrahydro-9-methyl-1-(1-propylbutyl)-7-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

RN 428500-50-9 CAPLUS

CN Pyrido[4,3,2-ef][1,4]benzodiazepine, 10-(2,4-dichlorophenyl)-4,5,6,7-tetrahydro-2-methyl-4-(1-propylbutyl)- (9CI) (CA INDEX NAME)

RN 428520-25-6 CAPLUS

CN 3H-Pyrido[4,3,2-de]quinazoline, 7-(dibenzofuranyl)-5-methyl-3-(1-propylbutyl)- (9CI) (CA INDEX NAME)

IT 212139-12-3P, 4-Chloro-2-methyl-8-(2,4-dichlorophenyl)-1,7-

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naphthyridine 344293-84-1P, 3-Amino-2-(2,4,6-
     trimethylphenyl)pyridine 428500-51-0P, 3-Amino-2-(2,4-
     dichlorophenyl)pyridine 428500-52-1P, 4-Hydroxy-2-methyl-8-
     (2,4,6-trimethylphenyl)-1,7-naphthyridine 428500-53-2P,
     4-Hydroxy-2-methyl-8-(2,4-dichlorophenyl)-1,7-naphthyridine
     428500-54-3P, 4-Chloro-2-methyl-8-(2,4,6-trimethylphenyl)-1,7-
     naphthyridine 428500-55-4P, 4-Chloro-2-methyl-5-nitro-8-(2,4,6-
     trimethylphenyl)-1,7-naphthyridine 428500-56-5P,
     4-(Heptan-4-ylamino)-2-methyl-5-nitro-8-(2,4,6-trimethylphenyl)-1,7-
     naphthyridine 428500-57-6P, 4-(Heptan-4-ylamino)-2-methyl-5-
     amino-8-(2,4,6-trimethylphenyl)-1,7-naphthyridine 428500-58-7p,
     4-(Heptan-4-ylamino)-2-methyl-5-amino-8-(2,4-dichlorophenyl)-1,7-
     naphthyridine
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (intermediate; prepn. of fused pyrimidonaphthyridines and
       pyrimidinoquinolines as CRF receptor antagonists)
RN
     212139-12-3 CAPLUS
CN
     1,7-Naphthyridine, 4-chloro-8-(2,4-dichlorophenyl)-2-methyl- (9CI) (CA
     INDEX NAME)
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RN 344293-84-1 CAPLUS CN 3-Pyridinamine, 2-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

RN 428500-51-0 CAPLUS CN 3-Pyridinamine, 2-(2,4-dichlorophenyl)- (9CI) (CA INDEX NAME)

RN 428500-52-1 CAPLUS CN 1,7-Naphthyridin-4-ol, 2-methyl-8-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

RN 428500-53-2 CAPLUS CN 1,7-Naphthyridin-4-ol, 8-(2,4-dichlorophenyl)-2-methyl- (9CI) (CA INDEX NAME)

RN 428500-54-3 CAPLUS
CN 1,7-Naphthyridine, 4-chloro-2-methyl-8-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

RN 428500-55-4 CAPLUS

CN 1,7-Naphthyridine, 4-chloro-2-methyl-5-nitro-8-(2,4,6-trimethylphenyl)-(9CI) (CA INDEX NAME)

RN 428500-56-5 CAPLUS

CN 1,7-Naphthyridin-4-amine, 2-methyl-5-nitro-N-(1-propylbutyl)-8-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

RN 428500-57-6 CAPLUS

CN 1,7-Naphthyridine-4,5-diamine, 2-methyl-N4-(1-propylbutyl)-8-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

10/016,694

RN 428500-58-7 CAPLUS
CN 1,7-Naphthyridine-4,5-diamine, 8-(2,4-dichlorophenyl)-2-methyl-N4-(1-propylbutyl)- (9CI) (CA INDEX NAME)

ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN L15 2001:435078 CAPLUS AN135:61346 DN Preparation of fused heterotricyclic compounds as antagonists against ΤI corticotropin-releasing factor receptor Hibi, Shigeki; Hoshino, Yorihisa; Yoshiuchi, Tatsuya; Shin, Kogyoku; IN Kikuchi, Kouichi; Soejima, Motohiro; Tabata, Mutsuko; Takahashi, Yoshinori; Shibata, Hisashi; Hida, Takayuki; Hirakawa, Tetsuya; Ino, Mitsuhiro Eisai Co., Ltd., Japan; et al. PΑ PCT Int. Appl., 255 pp. SO CODEN: PIXXD2 DTPatent LА Japanese FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. WO 2001042247 20010614 WO 2000-JP8811 PΙ A1 20001213 W: AU, BR, CA, CN, HU, IL, KR, MX, NO, NZ, RU, US, ZA RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR JP 2001233876 A2 20010828 JP 2000-375811 20001211 AU 2001-20235 AU 2001020235 **A5** 20010618 20001213 EP 1238979 Α1 20020911 EP 2000-983479 20001213 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR US 2002-148836 US 2003078277 A1 20030424 20020605 19991213 PRAI JP 1999-352553 Α W 20001213 WO 2000-JP8811 OS MARPAT 135:61346 GI

AB Compds. such as pyrazolo[1,5-a]pyrrolo[3,2-e]pyrimidine, dipyrazolo[1,5-a:4,3-e]pyrimidine, pyrrolo[3,2-c]quinoline, and pyrrolo[3,2-c][1,7]naphthyridine derivs. represented by general formula [I; A, B, D = N, O, S, (CR1R2)m, CO, CS, (un)substituted NH, SO, SO2 (wherein m = 0-4; R1, R2 = H, C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, C1-6 alkoxy, C3-8 cycloalkyl, etc.); E, G = N, O, S, (CR6R7)p, CO, CS, (un)substituted NH, SO, SO2 (wherein R6, R7 = H, C1-6 alkyl, optionally C1-4 alkyl-substituted C3-5 cycloalkyl, optionally substituted aryl, or heteroaryl, etc.; p = 0, 1,2); K, L = C, N; the ring formed by K, E, G, J, and L represents an (un)satd. 5- or 6-membered ring; M = M = H, halo, cyano, (un)substituted C1-6 alkyl, (un)substituted NH, OR13, S(O)qR14, (un)substituted C2-10 alkenyl or alkynyl, (un)substituted C1-6 alkoxy, C1-6 alkylthio, aryl, or heteroaryl (wherein R13 = H, optionally substituted aryl-C1-4

alkyl or heteroaryl-C1-4 alkyl, or aryl-heteroaryl; R14 = C1-6 alkyl optionally substituted aryl-C1-4 alkyl, aryl, heteroaryl-C1-4 alkyl, or heteroaryl; q = 0, 1, 2); the solid line accompanied by a dotted line represents a single or a double bond] or pharmacol. acceptable salts thereof or their hydrates, which are also adenylate cyclase inhibitors, are prepd. These compds. are useful for the prevention and/treatment of diseases related to corticotropin-releasing factor (CRF) and/or corticotropin-releasing factor receptor. The above diseases include depression, mania, child abuse due to depression, depression after child birth, anxiety, general anxiety, panic disorders, phobia, obsessive-compulsive disorders, post-traumatic-stress disorder, autism, emotional disorders, emotional disturbance, bipolar disorder, schizophrenia, peptic ulcer, irritable bowel syndrome, ulcerative colitis, Crohn's disease, diarrhea, constipation, intestinal functional abnormality accompanied by stress, neurol. vomiting, Alzheimer's disease, neurodegenerative disease, multiple infarction dementia, and senile dementia, neurol. appetite depression, eating disorders, obesity, diabetes, alc. dependence, drug preference, alc. or drug withdrawal symptom. They also include insomnia, migraine headache, stress headache, muscular stress headache, ischemic nerve disorders, excitatory toxin nerve disorders, stroke, progressive supranuclear paralysis, amyotrophic lateral sclerosis, multiple sclerosis, muscle spasm, chronic fatigue syndrome, neurol. social growth-retardation, epilepsy, head injury, spinal injury, writer's cramp, torticollis spastica, cervicobrachial syndrome, Meniere's syndrome, vegetative dystonia, hair loss, neuropathy, hypertension, cardiovascular disorders, tachycardia, congestive heart attack, hyperpnea syndrome, bronchial asthma, apnea syndrome, sudden infant death syndrome, inflammatory disorders, pain, allergy, impotence, menopausal syndrome, fertilization disorder, sterility, cancer, immune function disorders during HIV infection or caused by stress, hemorrhagic stress, Cushing's disease, thyroid gland function abnormality, meningitis, acromegaly, incontinence, and osteoporosis, etc. Thus, a soln. of 7-chloro-6-(2-chloroethyl)-3-mesityl-2,5-dimethylpyrazolo[1,5-a]pyrimidine and 3-aminopentane in Me Et ketone was refluxed for 1 h to give, after treatment with HCl in Et2O, 8-(1-ethylpropyl)-3-mesityl-2,5-dimethyl-7,8dihydro-6H-pyrazolo[1,5-a]pyrrolo[3,2-e]pyrimidine hydrochloride (II). II showed IC50 of 100 nM for inhibiting the binding of [125I] sauvagine to human CRF receptor expressed in HEK 293 cells and showed IC50 of 900 nM against adenylic acid cyclase.

## IT 344293-84-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of fused heterotricyclic compds. as antagonists against corticotropin-releasing factor receptor for preventives or remedies for CRF and/or CRF receptor-related diseases)

RN 344293-84-1 CAPLUS

3-Pyridinamine, 2-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

CN

10/016,694

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
AN >
     1998:568830 CAPLUS
DN
     129:202953
     Preparation of bicyclic nitrogen-containing heterocycles as CRF receptor
ΤI
     antagonists and methods relating thereto
     McCarthy, James R.
IN
     Neurocrine Biosciences, Inc., USA
PA
SO
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AB A variety of 5/6 and 6/6 bicyclic nitrogen-contg. heterocyclic compds. are disclosed, for use as CRF receptor antagonists. The compds. are useful for treatment of a variety of disorders, including those manifesting hypersecretion of CRF in a warm-blooded animal, such as stroke. The heterocycles include pyrrolopyrimidines, pyrrolotriazines, imidazotriazines, purines, benzimidazoles, imidazopyridines, pyridopyridazines, pyridazinopyrimidines, pyrimidinopyrimidines, and naphthyridines. For instance, Pd(PPh3)4-catalyzed coupling of 5-amino-4,6-dichloropyrimidine at its 4-position with 2,4-dichlorobenzeneboronic acid (40%), coupling of the product with 3-aminoheptane at the 6-position, and cyclization of the diamine product with tri-Et orthoacetate, gave the purine deriv. I. The latter had a Ki of 8.8 nM for inhibition of CRF specific binding in vitro.

IT 212139-12-3P, 2-Methyl-4-chloro-8-(2,4-dichlorophenyl)-1,7-naphthyridine

Ι

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; prepn. of bicyclic nitrogen heterocycles as CRF receptor antagonists)

RN 212139-12-3 CAPLUS

CN 1,7-Naphthyridine, 4-chloro-8-(2,4-dichlorophenyl)-2-methyl- (9CI) (CA INDEX NAME)